

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/940,101

DATE: 09/18/2001

TIME: 10:06:56

Input Set : A:\GENENT.072A2.txt

Output Set: N:\CRF3\09182001\I940101.raw

4 <110> APPLICANT: Gerritsen, Mary  
5 Sliwowski, Mark X.  
7 <120> TITLE OF INVENTION: Erbb4 ANTAGONISTS  
10 <130> FILE REFERENCE: GENENT.072A2  
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/940,101  
C--> 12 <141> CURRENT FILING DATE: 2001-08-27  
12 <150> PRIOR APPLICATION NUMBER: 60/229,679  
13 <151> PRIOR FILING DATE: 2000-09-01  
15 <150> PRIOR APPLICATION NUMBER: 60/265,516  
16 <151> PRIOR FILING DATE: 2001-01-31  
18 <160> NUMBER OF SEQ ID NOS: 4  
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
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23 <211> LENGTH: 5484  
24 <212> TYPE: DNA  
25 <213> ORGANISM: Homo sapiens  
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30 gcaggaaagg agaataaaact gagctctctc tctgacctgg aacagcagta ccgagccttg 180  
31 cgcaagtact atgaaaaactg tgagggtgtc atgggcaacc tggagataac cagcattgag 240  
32 cacaaccggg acctctcctt cctgcggtct gttcgagaag tcacaggcta cgtgttagtg 300  
33 gctcttaatc agtttcgtta cctgcctctg gagaatttac gcattattcg tgggacaaaa 360  
34 ctttatgagg atcgatatgc cttggcaata tttttaaact acagaaaaga tggaaacttt 420  
35 ggacttcaag aacttggatt aaagaacttg acagaaatcc taaatggtgg agtctatgta 480  
36 gaccagaaca aattcctttg ttatgcagac accattcatt ggcaagatat tgttcggaac 540  
37 ccatggcctt ccaacttgac tcttgtgtca acaaattgta gttcaggatg tggacgttgc 600  
38 cataagtctt gtactggccg ttgctgggga cccacagaaa atcattgcca gactttgaca 660  
39 aggacggtgt gtgcagaaca atgtgacggc agatgctacg gaccttacgt cagtgaactgc 720  
40 tgccatcgag aatgtgctgg aggctgctca ggacctaaag acacagactg ctttgccctgc 780  
41 atgaatttca atgacagtgg agcatgtgtt actcagtgtc cccaaacott tgtctacaat 840  
42 ccaaccacct ttcaactgga gcacaatttc aatgcåaaagt acacatatgg agcattctgt 900  
43 gtcaagaaat gtccacataa ctttgtggta gattccagtt cttgtgtgctg tgccctgcct 960  
44 agttccaaga tggaaagtaga agaaaatggg attaaaatgt gtaaaccctg cactgacatt 1020  
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46 tccagtaaca ttgacaaatt cataaactgt accaagatca atgggaattt gatctttcta 1140  
47 gtcactggta ttcatgggga cccttacaat gcaattgaag ccatagaccc agagaaaactg 1200  
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56 tccatctgtg tggagtgtga cccccagtgt gagaagatgg aagatggcct cctcacatgc 1740  
57 catggaccgg gtctgacaa ctgtacaaa tgctctcatt ttaaagatgg cccaaactgt 1800

ENTERED

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59 ccagatcggg agtgccaccc atgccatcca aactgcaccc aagggtgtaa cgggtccact 1920
60 agtcatgact gcattttacta cccatggacg ggccattcca ctttaccaca acatgctaga 1980
61 actccctga ttgcagctgg agtaattggg gggctcttca ttctgggtcat tgtgggtctg 2040
62 acatttgctg tttatgttag aagggaagagc atcaaaaaaga aaagagcctt gagaagattc 2100
63 ttggaaacag agttggtgga accattaact cccagtggca cagcacccaa tcaagctcaa 2160
64 cttcgtattt tgaaagaaac tgagctgaag agggtaaaag tccttggctc aggtgctttt 2220
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67 ctgatcatgg caagtatgga tcatccacac ctagtccggt tgctgggtgt gtgtctgagc 2400
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104 ttaaagtatt aactagtaat tatgttttca acacttttg gtttttttca ttttgtttg 4620
105 ctctgaccga ttcttttata ttgtctcccc tatttttggc ttttaatttct aattgcaaa 4680
106 atgtttacat caaagcttct tcacagaatt taagcaagaa atattttaat atagtgaat 4740

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107 ggccactact ttaagtatac aatctttaaata ataagaaagg gaggctaata tttttcatgc 4800
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109 gacactactt gatagggcgt tgggtgtctg aagagtagaa gggaaactaa gagacagttc 4920
110 tctgtggttc agggaaaacta ctgatacttt caggggtggc ccaatgaggg aatccattga 4980
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112 gcacttaagc tgtaatttta tttgttcttt ttctgaactc catttttgat tttgaatcaa 5100
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115 actatgatga gaggccagca cattatcttc atatgtcacc ttgtctacgc aaggaaattt 5280
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117 atttctagta tgagactatt tatatgaagt agaaggtaac tctttgcaca taaattggta 5400
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122 <211> LENGTH: 1308
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens
126 <400> SEQUENCE: 2
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130 20 25 30
131 Glu Asn Lys Leu Ser Ser Leu Ser Asp Leu Glu Gln Gln Tyr Arg Ala
132 35 40 45
133 Leu Arg Lys Tyr Tyr Glu Asn Cys Glu Val Val Met Gly Asn Leu Glu
134 50 55 60
135 Ile Thr Ser Ile Glu His Asn Arg Asp Leu Ser Phe Leu Arg Ser Val
136 65 70 75 80
137 Arg Glu Val Thr Gly Tyr Val Leu Val Ala Leu Asn Gln Phe Arg Tyr
138 85 90 95
139 Leu Pro Leu Glu Asn Leu Arg Ile Ile Arg Gly Thr Lys Leu Tyr Glu
140 100 105 110
141 Asp Arg Tyr Ala Leu Ala Ile Phe Leu Asn Tyr Arg Lys Asp Gly Asn
142 115 120 125
143 Phe Gly Leu Gln Glu Leu Gly Leu Lys Asn Leu Thr Glu Ile Leu Asn
144 130 135 140
145 Gly Gly Val Tyr Val Asp Gln Asn Lys Phe Leu Cys Tyr Ala Asp Thr
146 145 150 155 160
147 Ile His Trp Gln Asp Ile Val Arg Asn Pro Trp Pro Ser Asn Leu Thr
148 165 170 175
149 Leu Val Ser Thr Asn Gly Ser Ser Gly Cys Gly Arg Cys His Lys Ser
150 180 185 190
151 Cys Thr Gly Arg Cys Trp Gly Pro Thr Glu Asn His Cys Gln Thr Leu
152 195 200 205
153 Thr Arg Thr Val Cys Ala Glu Gln Cys Asp Gly Arg Cys Tyr Gly Pro
154 210 215 220
155 Tyr Val Ser Asp Cys Cys His Arg Glu Cys Ala Gly Gly Cys Ser Gly
156 225 230 235 240
157 Pro Lys Asp Thr Asp Cys Phe Ala Cys Met Asn Phe Asn Asp Ser Gly

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158          245          250          255
159 Ala Cys Val Thr Gln Cys Pro Gln Thr Phe Val Tyr Asn Pro Thr Thr
160          260          265          270
161 Phe Gln Leu Glu His Asn Phe Asn Ala Lys Tyr Thr Tyr Gly Ala Phe
162          275          280          285
163 Cys Val Lys Lys Cys Pro His Asn Phe Val Val Asp Ser Ser Ser Cys
164          290          295          300
165 Val Arg Ala Cys Pro Ser Lys Met Glu Val Glu Glu Asn Gly Ile
166 305          310          315          320
167 Lys Met Cys Lys Pro Cys Thr Asp Ile Cys Pro Lys Ala Cys Asp Gly
168          325          330          335
169 Ile Gly Thr Gly Ser Leu Met Ser Ala Gln Thr Val Asp Ser Ser Asn
170          340          345          350
171 Ile Asp Lys Phe Ile Asn Cys Thr Lys Ile Asn Gly Asn Leu Ile Phe
172          355          360          365
173 Leu Val Thr Gly Ile His Gly Asp Pro Tyr Asn Ala Ile Glu Ala Ile
174          370          375          380
175 Asp Pro Glu Lys Leu Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly
176 385          390          395          400
177 Phe Leu Asn Ile Gln Ser Trp Pro Pro Asn Met Thr Asp Phe Ser Val
178          405          410          415
179 Phe Ser Asn Leu Val Thr Ile Gly Gly Arg Val Leu Tyr Ser Gly Leu
180          420          425          430
181 Ser Leu Leu Ile Leu Lys Gln Gln Gly Ile Thr Ser Leu Gln Phe Gln
182          435          440          445
183 Ser Leu Lys Glu Ile Ser Ala Gly Asn Ile Tyr Ile Thr Asp Asn Ser
184          450          455          460
185 Asn Leu Cys Tyr Tyr His Thr Ile Asn Trp Thr Thr Leu Phe Ser Thr
186 465          470          475          480
187 Ile Asn Gln Arg Ile Val Ile Arg Asp Asn Arg Lys Ala Glu Asn Cys
188          485          490          495
189 Thr Ala Glu Gly Met Val Cys Asn His Leu Cys Ser Ser Asp Gly Cys
190          500          505          510
191 Trp Gly Pro Gly Pro Asp Gln Cys Leu Ser Cys Arg Arg Phe Ser Arg
192          515          520          525
193 Gly Arg Ile Cys Ile Glu Ser Cys Asn Leu Tyr Asp Gly Glu Phe Arg
194          530          535          540
195 Glu Phe Glu Asn Gly Ser Ile Cys Val Glu Cys Asp Pro Gln Cys Glu
196 545          550          555          560
197 Lys Met Glu Asp Gly Leu Leu Thr Cys His Gly Pro Gly Pro Asp Asn
198          565          570          575
199 Cys Thr Lys Cys Ser His Phe Lys Asp Gly Pro Asn Cys Val Glu Lys
200          580          585          590
201 Cys Pro Asp Gly Leu Gln Gly Ala Asn Ser Phe Ile Phe Lys Tyr Ala
202          595          600          605
203 Asp Pro Asp Arg Glu Cys His Pro Cys His Pro Asn Cys Thr Gln Gly
204          610          615          620
205 Cys Asn Gly Pro Thr Ser His Asp Cys Ile Tyr Tyr Pro Trp Thr Gly
206 625          630          635          640

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207 His Ser Thr Leu Pro Gln His Ala Arg Thr Pro Leu Ile Ala Ala Gly
208          645          650          655
209 Val Ile Gly Gly Leu Phe Ile Leu Val Ile Val Gly Leu Thr Phe Ala
210          660          665          670
211 Val Tyr Val Arg Arg Lys Ser Ile Lys Lys Lys Arg Ala Leu Arg Arg
212          675          680          685
213 Phe Leu Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly Thr Ala
214          690          695          700
215 Pro Asn Gln Ala Gln Leu Arg Ile Leu Lys Glu Thr Glu Leu Lys Arg
216 705          710          715          720
217 Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys Gly Ile
218          725          730          735
219 Trp Val Pro Glu Gly Glu Thr Val Lys Ile Pro Val Ala Ile Lys Ile
220          740          745          750
221 Leu Asn Glu Thr Thr Gly Pro Lys Ala Asn Val Glu Phe Met Asp Glu
222          755          760          765
223 Ala Leu Ile Met Ala Ser Met Asp His Pro His Leu Val Arg Leu Leu
224          770          775          780
225 Gly Val Cys Leu Ser Pro Thr Ile Gln Leu Val Thr Gln Leu Met Pro
226 785          790          795          800
227 His Gly Cys Leu Leu Glu Tyr Val His Glu His Lys Asp Asn Ile Gly
228          805          810          815
229 Ser Gln Leu Leu Leu Asn Trp Cys Val Gln Ile Ala Lys Gly Met Met
230          820          825          830
231 Tyr Leu Glu Glu Arg Arg Leu Val His Arg Asp Leu Ala Ala Arg Asn
232          835          840          845
233 Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe Gly Leu
234          850          855          860
235 Ala Arg Leu Leu Glu Gly Asp Glu Lys Glu Tyr Asn Ala Asp Gly Gly
236 865          870          875          880
237 Lys Met Pro Ile Lys Trp Met Ala Leu Glu Cys Ile His Tyr Arg Lys
238          885          890          895
239 Phe Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Ile Trp Glu
240          900          905          910
241 Leu Met Thr Phe Gly Gly Lys Pro Tyr Asp Gly Ile Pro Thr Arg Glu
242          915          920          925
243 Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Pro Gln Pro Pro Ile
244          930          935          940
245 Cys Thr Ile Asp Val Tyr Met Val Met Val Lys Cys Trp Met Ile Asp
246 945          950          955          960
247 Ala Asp Ser Arg Pro Lys Phe Lys Glu Leu Ala Ala Glu Phe Ser Arg
248          965          970          975
249 Met Ala Arg Asp Pro Gln Arg Tyr Leu Val Ile Gln Gly Asp Asp Arg
250          980          985          990
251 Met Lys Leu Pro Ser Pro Asn Asp Ser Lys Phe Phe Gln Asn Leu Leu
252          995          1000          1005
253 Asp Glu Glu Asp Leu Glu Asp Met Met Asp Ala Glu Glu Tyr Leu Val
254          1010          1015          1020
255 Pro Gln Ala Phe Asn Ile Pro Pro Pro Ile Tyr Thr Ser Arg Ala Arg

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VERIFICATION SUMMARY

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Input Set : A:\GENENT.072A2.txt

Output Set: N:\CRF3\09182001\I940101.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date